

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PREMIUMS

OFFERED BY THE

SOCIETY

FOR THE ENCOURAGEMENT OF

ARTS, MANUFACTURES,

AND

COMMERCE,

IN

THE YEAR M.DCC.XCIII.

TO THE

PUBLIC.

Adelphi-Buildings,

April 10, 1793.

HE chief objects of the attention of the Society for the Encouragement of Arts, Manufactures, and Commerce, in the application of their Rewards, are Ingenuity in the feveral branches of the POLITE and LIBERAL ARTS, useful Discoveries and Improvements in AGRICULTURE, MANU-FACTURES, MECHANICKS, and CHE-MISTRY, or the laying open any fuch to the Public; and, in general, all such useful Inventions, Discoveries, or Improvements (though not mentioned in the Book of Premiums), as may appear to have a tendency to the advantage of Trade and Commerce. The Society therefore, in pursuance of their plan, propose to bestow the following Premiums.

Premiums

Premiums for Planting and Husbandry.

Class 1. ACORNS. For having set, between the first of October, 1792, and the first of April, 1793, the greatest quantity of strong land, not less than ten acres, with Acorns, and seeds or cuttings of other trees, and for the effectually sencing and preserving the same, in order to raise timber and underwood, the GOLD MEDAL.

2. For the second greatest quantity of land, not less than five acres, sown or set agreeably to the above conditions, the SIL-VER MEDAL.

CERTIFICATES of setting or sowing, agreeably to the above conditions, and that there are not sewer than three hundred young Oaks on each acre, to be delivered to the Society on or before the first Tuesday in November, 1793.

3, 4. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in November, 1794. 5, 6. The same premiums are extended one year further.

CERTIFICATES to be produced on or befor the first Tuesday in November, 1795,

7, 8. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in November, 1796.

- 9. RAISING OAKS. To the person who shall have raised, since the year 1790, the greatest number of Oaks, not sewer than five thousand, either from young plants, or from acorns, in woods, parks, or forests, that have long been under timber, and effectually seuced and preserved the same, in order to secure a succession of oak timber in this kingdom; the Gold Medal.
- 10. For the next greatest quantity, not fewer than three thousand, the SILVER MEDAL.

CERTIFICATES that there were on the land, upon the first of November, 1793, at least

least the number of young Oak-trees required, in a thriving condition, effectually fenced and preserved, with an account of the methods pursued in making and managing the plantation, to be produced to the Society on or before the first Tuesday in January, 1794.

11, 12. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in January, 1795.

13, 14. The fame premiums are extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in January, 1796.

METHOD OF RAISING OAKS. To the person who shall ascertain in the best manner, by actual experiments, the comparative merits of the different modes of raising Oaks for timber, either by acorns set on land properly grubbed and tilled; from acorns sown at random among bushes, fern,

or other cover; or by young plants, previously raised in nurseries, and transplanted; regard being had to the expence, growth, and other respective advantages of the several methods; the Gold Medal.

The ACCOUNTS and proper CERTIFI-CATES to be produced to the Society on or before the first Tuesday in November, 1793.

- 16. The same premium is extended one year further. The Accounts and Certificates to be produced on or before the first Tueseay in November, 1794.
- 17. CHESNUTS. For having fown or fet, between the first of October, 1792, and the first of April, 1793, the greatest quantity of dry loamy land, not less than fix acres, with a mixture of Spanish Chefnuts, and the seeds or cuttings of other trees adapted to such soil; and for effectually sencing and preserving the same, in order to raise timber; the Gold Medal.

18. For the second greatest quantity, not less than four acres, the SILVER MEDAL.

CERTIFICATES of fowing or fetting agreeably to the above conditions, and that there are not fewer than three hundred Chefnut plants, in a thriving state, on each acre, to be delivered to the Society on or before the first Tuesday in November, 1793.

19, 20. The fame premiums are extended one year further.

CERTIFICATES to be delivered on of before the first Tuesday in November, 1794.

21, 22. The same premiums are extended one year further.

CERTIFICATES to be delivered on or before the first Tuesday in November, 1795.

23, 24. The same premiums are extended one year further.

CERTIFICATES to be delivered on or before the nist Tuesday in November, 1796.

- 25. ELM. For having planted the greatest number of the English Elm, not less than eight thousand, between the twenty-fourth of June, 1792, and the twenty-fourth of June, 1793; and for the having effectually senced and preserved the same, in order to raise timber; the Gold Medal.
- 26. For the second greatest number, not less than five thousand, the SILVER MEDAL.
- 27. For the third greatest number, not less than four thousand, the SILVER MEDAL.

CERTIFICATES of the having planted agreeably to the above conditions, that the plants were in a healthy and thriving state two years at least after making the plantation, and specifying the distance of the plants, to be delivered to the Society on

or before the first Tuesday in November, 1793.

28, 29, 30. The fame premiums are exitended one year further.

CERTIFICATES to be produced on or before the first Tuesday in November, 1794.

31, 32, 33. The fame premiums are extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in November, 1795.

34, 35, 36. The fame premiums are extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in November, 1796.

37. LARCH. For having planted out, between the twenty fourth of June, 1790, and the twenty-fourth of June, 1791, the greatest number of Larch-trees, not fewer than five thousand; and for having effectually fenced and preserved the same, in order to raise timber; the Gold Medal.

38. For the next greatest number, not fewer than three thousand, the SILVER MEDAL.

CERTIFICATES of the number of plants, that they were in a healthy and thriving flate two years at least after they were planted out, with a general account of the methods used in making the plantation, to be delivered to the Society on or before the last Tuesday in December, 1793.

39, 40. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1794.

41, 42. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1795.

43, 44. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1796.

45, 46. The same premiums are exatended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1797.

47, 48. The fame premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1798.

- N. B. The Larch-trees may be either planted, mixed with other trees, or by themselves, as may best suit the convenience of the planter.
- 49. SILVER FIR. For having planted out, between the twenty-fourth of June, 1789, and the twenty-fourth of June, 1790, in a mixed plantation of forest-trees, the greatest number of Silver Firs, not fewer than two thousand; and for having effectually fenced and preserved the same, in order to raise timber; the Gold Medal.

50. For the next greatest number, not fewer than one thousand, the SILVER MEDAL.

CERTIFICATES of the number of plants, that they were in a healthy and thriving state two years at least after they were planted out, with a general account of the methods used in making the plantation, to be delivered to the Society on or before the last Tuesday in December, 1793.

51, 52. The fame premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1794.

52, 53. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1795.

54, 55. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1796.

56. UPLAND OR RED WILLOW. For the greatest number of acres, not less than three, planted before the end of April, 1792, with Upland or Red Willow, properly senced and secured; the number of plants on each acre to be at least twelve hundred; the Gold Medal, or Twenty Pounds.

CERTIFICATES of the number of plants, and that they were in a thriving state at the time of signing such Certificates, to be produced to the Society on or before the last Tuesday in November, 1794.

It is well known that this species of Willow thrives well on dry sandy land.

57. OSIERS. To the person who shall have planted, before the twelsth of April, 1793, the greatest quantity of land, not less than three acres, with those kinds of Willows,

Willows, commonly known by the names of Ofier, Spaniard, or new kind, fit for the purpose of basket-makers, n t few r than twelve thousand plants on each acre; Twenty Pounds.

58. For the fecond greatest quantity of land, not less than two acres, Ten Pounds.

CERTIFICATES of the planting, and that the plants are in a thriving state at the time of signing the Certificate, to be produced on or before the last Taesday in November, 1793.

59, 60. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in November, 1794.

61. ALDER. For having planted, in the year 1790, the greatest number of Alders, not less than three thousand, on an estate the property of one person; the Gold Medal.

CERTI-

CERTIFICATES of the number of plants, and that they were in a thriving state two years at least after being planted, to be delivered to the Society on or before the last Tuesday in December, 1793.

62. The same premium is extended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1794.

63. The fame premium is extended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1795.

64. The same premium is extended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1796.

65. ASH. For having fown or fet, in the year 1790, the greatest quantity of land,

not less than fix acrès, with Ash for timber, intermixed with seeds, cuttings, or plants of such other trees as are adapted to the soil; the Gold Medal.

66. For the next greatest quantity, not less than four acres, the SILVER MEDAL.

CERTIFICATES of the fowing or fetting agreeably to the above conditions, that there are not fewer than one hundred Ash plants on each acre, in a thriving and healthy condition, two years at least after the sowing or setting, with a general account of the methods used in making the plantation, to be delivered to the Society on or before the last Tuesday in December, 1793.

67, 68. The fame premiums are extended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1794.

69, 70. The fame premiums are extended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1795.

71, 72. The same premiums are extended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1796.

73, 74. The same premiums are extended one year further.

CERTIFICATES to be delivered on or before the last Tuesday in December, 1797.

75. MIXED TIMBER-TREES. To the person who shall have inclosed, planted, or sown, the greatest number of acres, not less than ten, with the best sorts of Forest-trees, for timber, between the first of October, 1789, and the first of May, 1791; the Gold Medal.

An account of the methods used in making the plantations, and of the nature of the soil, together with proper Certificates that the trees were in a thriving and healthy state two years at least after making the plantation, to be delivered to the Society on or before the first Tuesday in November, 1793.

76. The fame premium is extended one year further.

The Accounts and CERTIFICATES to be delivered to the Society on or before the first Tuesday in November, 1794.

77. The same premium is extended one year further.

The Accounts and CERTIFICATES to be delivered to the Society on or before the first Tuesday in November, 1795.

78. The same premium is extended one year further.

The ACCOUNTS and CERTIFICATES to be delivered to the Society on or before the first Tuesday in November, 1796.

- N. B. With the above forest-trees, the seeds, cuttings, or plants, of such other trees as are adapted to the soil, and proper for underwood, may be intermixed.
- 79. SECURING PLANTATIONS OF TIMBER-TREES. To the person who shall give to the Society the most satisfactory Account, sounded on experience, of the most effectual and least expensive method of securing young plantations of Timber-Trees, from Hares and Rabbits, as well as Sheep and larger cattle, which at the same time shall be least subject to the depredations of wood-stealers, the Silver Medal of Twenty Pounds.

The ACCOUNTS and CERTIFICATES of the efficacy of the method, to be produced to the Society on or before the first Tuesday in November, 1793.

80. The same premium is extended one year further.

The

The Accounts and Certificates to be produced on or before the first Tuesday in November, 1794.

- 81. MULBERRY CUTTINGS, or TREES. For having planted the greatest number of White or Black Mulberry Cuttings or Trees, not fewer than three hundred, in the year 1791, for the purpose of feeding Silk-worms; the Gold Medal, or Twenty Pounds.
- 82. For the second greatest quantity, not sewer than one hundred and fifty, the SILVER MEDAL, or TEN POUNDS.

CERTIFICATES of such planting, with the manner of culture, and that the trees were growing in the month of July, 1793, to be produced to the Society on or before the first Tuesday in November, 1793.

*** The Candidates for planting all kinds of Trees are to certify, that the respective Plantations

Plantations are properly fenced and secured, and particularly to state the Condition the Plants were in at the time of signing such Certificates.

Any information which the Candidates for the foregoing Premiums may choose to communicate, relative to the methods made use of in forming the Plantation, or promoting the growth of the several Trees, or any other observations that may have occurred on the subject, will be thankfully received.

83. TREES FOR USE WHEN EX-POSED TO THE WEATHER. To the person who shall send the most satisfactory account and certificate, verified by experiments, to determine which of the sollowing trees is of the greatest utility for timber or poles, for use, when exposed to the weather, viz.

Larch, Spanish Chesnut,
Black Poplar, Willow,
Ash, Alder,
Beech

Beech, Lombardy Poplar; Silver Fir, the Gold Medal.

The Accounts and CERTIFICATES to be produced on or before the fecond Tuefday in December, 1793.

84. The same premium is extended one year further.

The ACCOUNTS and CERTIFICATES to be produced on or before the fecond Tuesday in December, 1794.

85. PLANTING BOGGY OR MO-RASSY SOILS. For an account of the best set of experiments sent by the planter, or his representative, to ascertain the comparative advantages of planting boggy or morassy soils with White Poplar, Black Poplar, Lombardy Poplar, and Willow, the Gold Medal, or Twenty Guinneas.

It is required that not less than half an acre be planted with each, and the plants to be not more than four feet asunder.

It is also required that the plantation stand sourteen years, at the end of which to be all cut down and measured, or accurately measured standing; the Certificates of the measure and value, and that the whole is properly senced and secured, to be produced on or before the first Tuesday in January, 1794.

- N. B. Any information relating to the state of the plantation, if sent to the Society between the time of planting, and claiming the premium, will be thankfully received.
- 86. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in January, 1795.

87. The same premium is extended to the year 1796.

CERTIFICATES to be produced on or before the first Tuesday in January, 1797.

88. COMPARATIVE CULTURE OF WHEAT. For the best set of experiments

riments made on not less than eight acres, four of which to be fown broad-cast, and four drilled, to ascertain whether it is most advantageous to cultivate wheat by fowing it in the common broad-cast way, or by drilling it in equidifiant rows, hoeing the intervals; the GOLD MEDAL, or the SILVER MEDAL and TWENTY GUINEAS.

It is required that an account of the nature and condition of the land on which the experiments are made, together with an account of the produce of the Corn, be produced to the Society on or before the first Tuesday in February, 1794.

89. The same premium is extended one year further.

The Accounts to be produced to the Society on or before the first Tuesday in February, 1795.

90. COMPARATIVE CULTURE OF WHEAT. For the best set of experiments, made on not less than eight acres of land, four of which to be fown broad-T

cast, and sour dibbled, to ascertain whether it is most advantageous to cultivate Wheat by sowing it in the common broad-cast way, or by dibbling it in equidistant rows, hoeing the intervals; the Gold Medal, or the Silver Medal and Thirty Guineas.

It is required that an account of the nature and condition of the land on which the experiments are made, together with an account of the produce of the Corn, be produced to the Society on or before the first Tuesday in February, 1794.

91. BEANS AND WHEAT. To the person who shall have planted or drilled, between the first of September, 1791, and the first of March, 1792, the greatest quantity of land, not less than ten acres, with Beans, and shall have sown the same land with Wheat in the same year, 1792; TWENTY GUINEAS.

It is required that an account of the fort and quantity of Beans, the time of planting or drilling, and of reaping or mowing them,

the

the produce per acre threshed, the application of the straw, the expence of planting or drilling, hand or horse hoeing, the distance of the rows, and the quality of the soil, together with Certificates of the number of acres, and that the land was actually sown with Wheat in the year 1792, be produced on or before the first Tuesday in November, 1793.

- N. B. The Society have been informed, that Beans may be drilled or planted so early as the month of December, from whence may be derived the advantage of an early harvest; in which case the straw will be far more valuable than that from a later planting or drilling.
- 92. The same premium is extended one year further.

The Accounts to be produced on or before the first Tuesday in November, 1794.

93. The same premium is extended one year further.

T 2 The

The Accounts to be produced on or before the first Tuesday in November, 1795.

94. DRILL HUSBANDRY. To the person who, in the year 1793, shall have cultivated the greatest quantity of land, not less than four hundred acres, under the Drill system, the wheat sown in the autumn of the year 1792 included, the GOLD MEDAL.

An account of the quality of the soil, the various crops, and of the times of drilling and hoeing, with Certificates of the quantity of land, and the general appearance of the crop, to be delivered on or before the third Tuesday in February, 1794.

95. The same premium is extended one year further.

The ACCOUNTS and CERTIFICATES to be delivered on or before the third Tuesday in February, 1795.

277

of experiments made on at least fix acres of land, to determine the comparative advantage of the drill or broad-cast method in the cultivation of Turneps; the Gold Medal, or the Silver Medal and Ten Guineas.

The ACCOUNTS to be delivered in, on or before the third Tuesday in April, 1794.

It is required that one half of the land be drilled, and the other half fown broadcast.

97. The same premium is extended one year further.

The Accounts to be delivered on or before the third Tuesday in April, 1795.

98. GREEN VEGETABLE FOOD. For the best account, confirmed by experiments, of the Vegetable Food (Cabbages and Turneps excepted), growing in the months of March and April, that will most increase the milk in Mares, Cows, and

T₃ Ewes,

Ewes, at that season; provided such food can be cultivated at an expence that will admit of its being applied to the above purposes; the Gold Medal, or the Silver Medal and Ten Guineas.

CERTIFICATES to be produced on or before the fecond Tuesday in November, 1793.

99. The same premium is extended one year further.

CERTIFICATES to be produced on or before the fecond Tuesday in November, 1794.

of the Turnep-rooted Cabbage, by sowing it broad-cast, or in drills, and hoeing out the plants, as is practised with the common Turnep,

Turnep, or by fowing the feed in nurseries, and transplanting the plants at proper distances, hoeing the intervals; the SILVER MEDAL and TEN Pounds.

It is required that at least two acres be cultivated in each manner, and CER-TIFICATES of the culture, with an account of the foil, expence, and produce of each separately, be produced on or before the first Tuesday in October, 1793.

101. The same premium is extended one year further.

CERTIFICATES and ACCOUNTS to be produced on or before the first Tuesday in October, 1794.

102. TURNEP-ROOTED CABBAGE. For having raised, and duly cultivated, Turnep-rooted Cabbage, in the year 1792, for the feeding Cattle or Sheep, on the greatest number of acres, not less than ten, and giving an account of the foil, culture, time, and manner of feeding off, produce, and the T 4 effects

effects on Cattle or Sheep fed with it; the Gold Medal.

103. For the next greatest number of acres, not less than five, the SILVER ME-DAL and TEN GUINEAS.

CERTIFICATES of the quantity of land, with the accounts, to be produced on or before the last Tuesday in October, 1793.

104, 105. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in October, 1794.

106. POTATOES FOR FEEDING CATTLE AND SHEEP. To the person who, in the year 1792, shall have cultivated the greatest quantity of land, not less than sour acres, with Potatoes, for the sole purpose of feeding Cattle and Sheep, the Gold Medal, or Twenty Guineas.

CERTIFICATES, with fatisfactory Accounts of the expence and manner of cultivating the Potatoes, and the application of them

them to the above purposes, and the success that has attended the use of them, to be delivered to the Society on or before the second Tuesday in November, 1793.

107. The same premium is extended one year further.

CERTIFICATES to be delivered on or before the fecond Tuesday in November, 1794.

108. The same premium is extended one year further.

CERTIFICATES to be delivered on or before the fecond Tuesday in November, 1795.

N.B. Should any Gentleman have already cultivated Potatoes for the purposes mentioned in the above advertisement, any information from him on the subject will be thankfully received by the Society.

109. CULTIVATING ROOTS AND HERBAGE FOR FEEDING SHEEP AND BLACK CATTLE. For the most fatis-

fatisfactory experiments made between Michaelmas, 1792, and the first of May, 1793, in order to ascertain which of the following plants can be cultivated and housed, or otherwise secured for winter fodder, to the greatest advantage, viz.

Turnep-rooted Cabbage, Carrots,
Turnep Cabbage, Parfneps,
Turneps, Potatoes;

The Accounts to be produced on or before the first Tuesday in November, 1793.

It is required that the above roots be taken off the land by the last day of October, 1792; that a crop of Wheat may be fown in the same ground, and the particulars of the sowing and planting, taking up, produce, preserving, and application to the feeding Sheep and Black Cattle, be specified. The comparative experiments must be made between two or more of any of the above-mentioned plants, and not less than

one acre be cultivated with each particular kind of plant.

- N. B. Great advantage will arise to the Farmer occupying land in the neighbourhood of extensive commons, from the conveniency of keeping large flocks of Sheep, and herds of Cattle, if the difficulty of supporting them through the winter was obviated by a due knowledge of this practice.
- 110. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in November, 1794.

TIT. STALL-FEEDING HORSES WITH GREEN VEGETABLES. To the person who shall keep the greatest number of Horses, not sewer than sour, in the Stall or Stable, during the greatest number of months in the year, on Carrots, Potatoes, Lucern, Saintsoin, Clover, Vetches, or any other green vegetable food raised on land

land in his own possession; the SILVER MEDAL and TEN GUINEAS.

It is required that the number of horses so sed, the quantity of land employed in raising the green vegetable sood, the quantity of hay and corn (if any) consumed, the state and condition of the horses, an account of the work done by them, and of the quantity of dung obtained, as near as can be ascertained, be fully and particularly specified.

The Accounts and CERTIFICATES to be produced to the Society on or before the fecond Tuesday in February, 1794.

WEATHER. To the person who shall discover to the Society the best and cheapest method, superior to any hitherto practised, of making Hay in wet weather, the Gold Medal, or Thirty Guineas.

A full Account of the method employed, and of the expence attending the process, with not less than fifty-fix pounds of the hay; hay; and Certificates that at least the produce of fifteen acres of land has been made according to the method described, and that the whole is of equal quality with the samples; to be produced to the Society on or before the first Tuesday in January, 1794.

113. The same premium is extended one year further.

The SAMPLES and CERTIFICATES to be produced on or before the first Tuesday in January, 1795.

114. The fame premium is extended one year further.

The SAMPLES and CERTIFICATES to be produced on before the first Tuesday in January, 1796.

RHUBARB. For having raifed, before the end of the year 1793, the greatest number of plants, not less than three hundred, of Rheum Palmatum, or true Rhubarb, the Gold Medal.

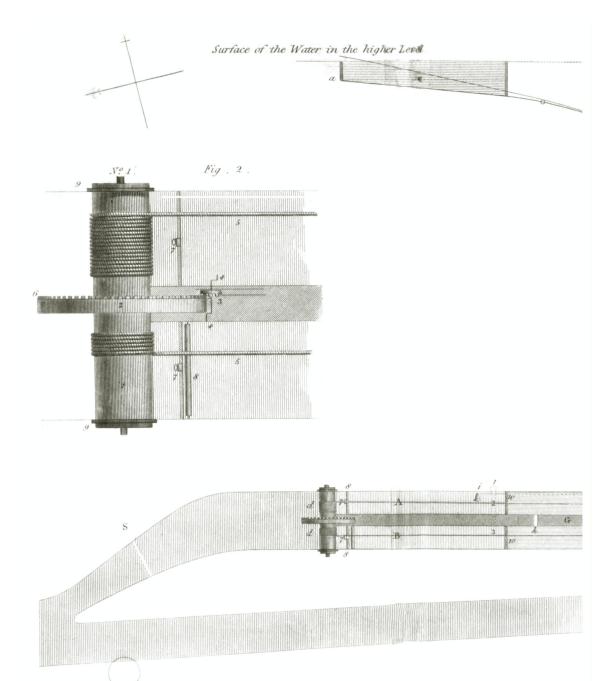
116. For the next greatest number, not less than two hundred plants, the SILVER MEDAL.

CERTIFICATES of the number of plants, that they stand at least four feet asunder, that they have been in a thriving state during the preceding summer, with an account of the soil, culture, and aspect, to be produced on or before the second Tuesday in February, 1794.

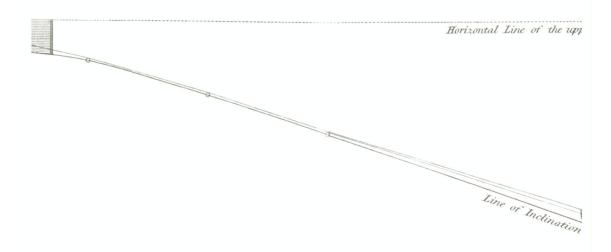
tended one year further.

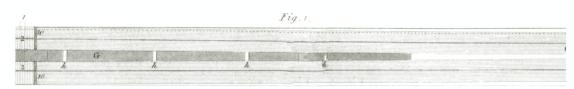
CERTIFICATES to be produced on or before the second Tuesday in February, 1795.

quantity of Rhubarb, of British growth, not less than twenty pounds weight, equal to such as is commonly sold in the shops under the name of Turkey or Russia Rhubark; five pounds of which, as a sample, with Certificates that the remainder is of equal goodness, and a particular Account



Pit in rough Close





GROUND PLAN

al Line of the upper Level

Line of Indination of the undergraind Plane

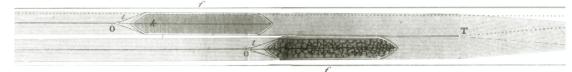
PLAN 8

His Grace the

UNDERGROUNI

at Walkde.

Worsley i



TUND PLAN

PLAN & SECTION

irace the Duke of Bridgewater's
RGROUND INCLINED PLANE
at Walkden Moor Cottiery

Worsley in Lancashire.

Surface of the Water at the lower Level

Lowry sculp.

count of the manner of culture and cure, to be produced on or before the first Tuesday in November, 1793; the GOLD ME-DAL.

120. For the next greatest quantity, not less than ten pounds weight, the SILVER MEDAL.

121, 122. The same premiums are extended one year further.

The SAMPLES and CERTIFICATES to be produced on or before the first Tuesday in November, 1794.

123. ASCERTAINING THE COM-PONENT PARTS OF ARABLE LAND. To the person who shall produce to the Society the most satisfactory set of experiments, to ascertain the due proportion of the several component parts of Arable Land, in one or more counties in Great Britain, by an accurate analysis of it; and who, having made a like analysis of some poor land, shall, by comparing the component parts of each, and thereby ascertaining the the deficiences in the poor soil, improve a quantity of it, not less than one acre, by the addition of such parts as the former experiments shall have discovered to be wanting therein, and therefore probably the cause of its sterility; the Gold Medal, or Fifty Guineas,

It is required that the manurings, ploughings, and crops of the improved land, be the same after the improvement as before; and that a minute account of the produce in each state, of the weather, and of the various influencing circumstances, together with the method made use of in analysing the soils, be produced, with proper Certificates, and the chemical results of the analysis, which are to remain the property of the Society, on or before the last Tuesday in November, 1793.

It is expected that a quantity, not less than fix pounds, of the rich, of the poor, and of the improved soils, be produced with the Certificates.

N. B. Among the methods or processes made use of by Chemists, and called DRY or MOIST, the latter only appears adapted to the ascertaining the respective proportions of the component parts of Arable earth.—Dr. Shaw, in his Chemical Lectures; Dr. Home, in his Principles of Agriculture; Dr. George Fordyce, in his Elements of Agriculture; and Sir Torbern Bergmen, in his "Dissertation sur les Terres Géoponiques;" have treated of these subjects.

124. The same premium is extended one year further.

The Accounts to be produced on or before the last Tuesday in November, 1794.

125. The same premium is extended one year further.

The Accounts to be produced on or before the last Tuesday in November, 1795.

126. The same premium is extended one year further.

The

The Accounts to be produced on or before the last Tuesday in November, 1796.

127. The same premium is extended one year further.

The Accounts to be produced on or before the last Tuesday in November, 1797.

128. DRAINING LAND. To the person who, in the year 1793, shall make the greatest number of yards, not sewer than one thousand, of Hollow Drain, of brick, stone, or such like durable materials, for the improvement of land injured by water arising from internal springs; the GOLD MEDAL OF THIRTY GUINEAS.

Particular accounts of the nature, quality, fpontaneous produce, and yearly value of the Land before draining, and the supposed value afterwards; the nature and texture of the under-strata whence the springs arise; the depth and width of the drains; the quantity of supposed water discharged,

charged, the expence of labour and materials per yard, in length, when finished; a sketch or plan of all the drains, and their several inclinations and distances from each other; with Certificates of the number of acres drained, and that the land was actually wet and springy before draining, but dry and firm afterwards; to be produced to the Society on or before the third Tuesday in February, 1794.

129. The same premium is extended one year further.

The Accounts and CERTIFICATES to be produced on or before the third Tuesday in February, 1795.

130. IMPROVING LAND LYING WASTE. For the best Account of a method of improving any of the following soils, being land lying waste or uncultivated, viz. Clay, Gravel, Sand, Chalk, Moor or Peat-earth, and Bog; verified by experiments on not less than sifty acres of land; to be produced on or before the second Tues-

U 2 day

day in December, 1793; the GOLD ME-DAL, or the SILVER MEDAL and TWENTY GUINEAS for each.

131. For the next greatest quantity of land, not less than twenty-five acres, the SILVER MEDAL and TEN GUINEAS.

The foil, manner of improvement, expence, and product, are required to be fully explained.

132, 133. The same premiums are extended one year further.

The Accounts to be produced on or before the second Tuesday in December, 1794.

134, 135. The fame premiums are extended one year further.

The Accounts to be produced on or before the second Tuesday in December, 1795.

136. MANURES. For the most fatisfactory set of experiments, to ascertain the comparative advantages of the follow-

ing Manures, used as Top-dressings, on Grass or Corn Land, viz. Soot, Coal-Ashes, Wood-Ashes, Lime, Gypsum, Night-soil; the Gold Medal, or the Silver Medal and Twenty Guineas.

It is required that not less than half an acre of land be appropriated to each Manure, the soils similar, and lying near each other; and if the Manure be used on Corn Land, then it is required that the same kind of Grain be sown the same year on each spot; the experiments to be continued not less than two years.

An ACCOUNT of the nature of the soil, quantity and expence of the Manure, and Crops, with CERTIFICATES, to be produced on or before the first Tuesday in December, 1793.

137. The same premium is extended one year further.

The Accounts and Certificates to be delivered to the Society on or before the first Tuesday in February, 1794.

It is required that the above experiments be made between two or more of the above-mentioned Manures, and that not less than two acres of land be dressed with each Manure. An account of the nature of the soil, quantity and expence of the Manure, and crops, with Certificates, to be produced on or before the last Tuesday in February, 1794.

131. The fame premium is extended one year further.

The Accounts and Certificates to be produced on or before the last Tuesday in February, 1795.

139. IMPROVING WASTEMOORS. For the improvement of the greatest number of acres of Waste Moor-Land, not less than one hundred, the Gold Medal.

It is required that the land before improvement be absolutely uncultivated, and in a great measure useless; that in its improved state it be included, cultivated, and divided into sields, sufficient for the use and occupation of a tenant.

CERTI-

CERTIFICATES of the number of acres. of the quality of the Moor so improved, of the mode and expence of the improvement, the state it is in as to the proportion of grass to arable, and the average value thereof, to be produced on or before the first Tuesday in February, 1794.

140. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in February, 1795.

141. The fame premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in February, 1796.

142. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in February, 1797.

143. GAINING LAND FROM THE SEA. To the person who shall produce to the Society an account of the best method, verified by actual experiment, of gaining Land from the Sea, not less than twenty acres, on the coast of England or Wales, the Gold Medal.

CERTIFICATES of the quantity of Land, and that the experiments were begun after the first of January, 1788, to be produced to the Society on or before the first Tuesday in October, 1793.

N.B. The Society have been credibly informed, that land has been gained on the coast of Holland, by fixing rows of whisps of straw upright in the sand, at about a foot distant from each other, or by fixing stakes at proper distances from each other, and wattling straw-bands between them.

144. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in October, 1794.

145. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in October, 1795.

146. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in October, 1796.

147. MACHINE TO ANSWER THE PURPOSE OF REAPING OR MOWING CORN. For inventing a Machine to answer the purpose of mowing or reaping Wheat, Rye, Barley, Oats, or Beans, by which it may be done more expeditiously and cheaper than by any method now practised, provided it does not shed the Corn or Pulse more than the methods in common practice, and that it lays the straw in such a manner as that it may be easily gathered up for binding; Ten Guinners.

The

The MACHINE, with CERTIFICATES that at least three acres have been cut by it, to be produced to the Society on or before the second Tuesday in December, 1793.

Simplicity and cheapness in the conftruction will be considered as principal parts of its merit.

148. IMPROVED HOE. To the person who shall produce to the Society the most improved or best-constructed Horse or Hand Hoe, superior to any hitherto in use, for the purpose of clearing from weeds, and loosening the Soil in, the intermediate spaces of all Crops of Corn sown in equidistant rows, and which shall earth up the young plants at the same time; the Gold Medal, or Twenty Guineas.

A Hoe, with Certificates of its having been successfully used, to be produced to the Society on or before the first Tuesday in December, 1793.

149. The fame premium is extended one year further.

The

The Hoe, with CERTIFICATES, to be produced on or before the first Tuesday in December, 1794.

of the Cockchafer, or of preventing or checking the destructive effects which always attend Corn, Peas, Beans, and Turneps, when attacked by those insects; the SILVER MEDAL and Ten Guine GRUB OF THE COCKCHAFER. To the person who shall discover to the Society an effectual method, verified by repeated and satisfactory trials, of destroying the Grub of the Cockchafer, or of preventing or checking the destructive effects which always attend Corn, Peas, Beans, and Turneps, when attacked by those insects; the SILVER MEDAL and TEN GUINEAS.

The Accounts to be produced on or before the first Tuesday in January, 1794.

To the person who shall discover to the Society an effectual method, verified by repeated and satisfactory trials, of destroying the insect called the Wire-worm, or of preventing or checking the destructive effects which always attend Corn, Beans, Peas, or Pulse, when attacked by those insects:

fects; the Silver Medal and Ten Guineas.

The Accounts to be produced to the Society on or before the first Tuesday in January, 1794.

ON HOPS AND CATERPILLARS ON FRUIT-TREES AND CULINARY PLANTS. To the person who shall discover to the Society an easy and efficacious method of destroying the Fly on Hops, and Caterpillars on Fruit-trees and Culinary Plants, superior to any hitherto known or practised, the Gold Medal, or Thirty Pounds.

ACCOUNTS, and CERTIFICATES that the method has been effectually practifed on not less than fix acres of Hop Ground, or an Orchard or Garden of not less than two acres, to be delivered to the Society on or before the first Tuesday in February, 1794.

153. CURE OF THE ROT IN SHEEP. To the person who shall discover cover to the Society the best and most effectual method of curing the disease called the Rot in Sheep, verified by repeated and satisfactory experiments, the GOLD MEDAL, or THIRTY POUNDS.

It is expected that the candidates furnish accurate accounts of the nature, symptoms, and cure of the disease, together with the imputed cause thereof, and the actual or probable means of prevention, which, with proper Certificates, must be delivered to the Society on or before the first Tuesday in February, 1794.

154. PREVENTING AND CURING THE ILL EFFECTS OF THE FLY ON SHEEP. To the person who shall discover to the Society the most effectual method of preventing and curing the ill effects of the Fly on Sheep, the SILVER MEDAL, OF TWENTY GUINEAS.

It is required that the method be afcertained by repeated experiments, and that a CERTIFICATE of its efficacy be delivered the

the Society on or before the first Tuesday in December, 1793.

155. The same premium is extended one year further.

The ACCOUNTS and CERTIFICATES to be delivered to the Society on or before the first Tuesday in December, 1794.

Premiums

Premiums for Discoveries and Improvements in Chemistry, Dying, and Mineralogy.

156. KELP. For the greatest quantity, not less than four tons, of Kelp, containing a much larger proportion of Alkaline Salt than any Kelp now made for sale, TWENTY POUNDS.

A specimen of one hundred weight to be produced on or before the first Tuesday in January, 1794; together with CERTIFICATES that the whole quantity is equal to the specimen, and made in Great Britain or Ireland of Sea-weed.

157. BARILLA. For the greatest quantity of merchantable Barilla, not less than half a ton, made from Spanish Kali, or any other plant raised in Great Britain, the Gold Medal.

A Sample of not less than twenty-eight pounds, with a CERTIFICATE that half a ton has been made, to be produced on or before the first Tuesday in January, 1794.

304 CHEMISTRY.

- 158. PRESERVING SEEDS OF VEGETABLES. For the best method of preserving the Seeds of Plants in a state sit for vegetation a longer time than has hitherto been practised, such method being superior to any known to the public, and verified by sufficient trial; to be communicated to the Society on or before the first Tuesday in December, 1793; the Gold Medal.
- THE SACCHARINE SUBSTANCE OF TREACLE IN A SOLID FORM. To the person who shall discover to the Society the best method of separating the Saccharine Substance of Treacle in a solid form, at such an expence as will render it advantageous to the public, the Gold Me-DAL, or FIFTY POUNDS.

A quantity of the Saccharine Substance, fo separated, in a solid form, not less than thirty pounds weight, with an account of the process, and Certificates that not less than one hundred weight has been prepared,

to be produced to the Society on or before the first Tuesday in February, 1794.

The same premium is extended one year further.

SAMPLES and CERTIFICATES to be produced to the Society on or before the first Tuesday in February, 1795.

161. PRESERVING FRESH WA-TER SWEET. To the person who shall produce to the Society the best account, verified by satisfactory trials, of an efficacious method of preserving Fresh-Water sweet during long voyages; the GOLD MEDAL, or FIFTY POUNDS.

ACCOUNTS and full descriptions of the methods made use of, in order that it may be known that nothing injurious enters therein, to be produced to the Society, with at least thirty gallons of Water so preserved, and proper Certificates, on or before the last Tuesday in December, 1793.

Х.

306 CHEMISTRY.

one year further.

The Accounts and CERTIFICATES to be produced on or before the last Tues-day in December, 1794.

163. The same premium is extended one year further.

The ACCOUNTS and CERTIFICATES to be produced on or before the first Tues-day in December, 1795.

- 164. DESTROYING SMOKE. For the best account, ascertained by proper experiments, of a method of destroying or burning the Smoke of sires belonging to Steam-Engines, Furnaces, employed in calcining or smelting Metals, or other large works, in order to prevent annoyance to the neighbourhood; to be produced on or before the first Tuesday in January, 1794; the Gold Medal.
- 165. The same premium is extended one year further.

The Accounts to be produced on or before the first Tuesday in January, 1795.

the person who shall invent the best method by which the Smoke of Steam-Engines, Brew-houses, Sugar-houses, or Furnaces, may be advantageously condensed and collected in the form of Tar, or some other useful material; the Gold Medal, or Fifty Guineas.

The Accounts, with proper CERTI-FICATES of the method having been successfully employed, and specimens of the materials produced, to be delivered to the Society on or before the first Tuesday in December, 1793.

167, The same premium is extended one year further.

The Accounts and CERTIFICATES to be produced on or before the first Tues-day in December, 1794.

308 CHEMISTRY.

168. CANDLES FROM RESIN. To the person who shall discover to the Society the best method of so reducing the inflammable quality of Resin, as to adapt it to the purposes of making Candles sit for common use, at a price much inferior to that of Candles made of Tallow only; the GOLD MEDAL, or THIRTY GUINEAS.

Six pounds at least of the Candles so prepared, with an Account of the process, to be delivered to the Society on or before the first Tuesday in December, 1793.

disclosing to the Society an effectual method of purifying Fish-Oil from the glutinous matter that encrusts the wicks of lamps and extinguishes the light, though fully supplied with oil; the GOLD MEDAL, or FIFTY GUINEAS.

It is required that the whole of the process be fully and fairly disclosed, in order that that fatisfactory experiments may be made by the Society, to determine the validity of the claim; and that CERTIFICATES that not less than twenty gallons have been purified according to the process delivered in, must, together with two gallons of the Oil in its unpurified state, and two gallons so refined, be produced to the Society on or before the second Tuesday in February, 1794.

170. The same premium is extended one year further.

CERTIFICATES and Samples to be produced on or before the fecond Tuesday in February, 1795.

171. CLEARING FEATHERS FROM THEIR ANIMAL OIL. To the perfon who shall discover to the Society the best and most expeditious method, superior to any hitherto practised, of clearing feathers from their offensive animal oil, for the use of upholders in making beds, cushions, &c. Forty Guineas.

X₃ A quan-

310 CHEMISTRY,

A quantity of Feathers so cleared, not less than twenty pounds weight, with a full account of the process, to be produced to the Society, on or before the first Tuesday in February, 1794.

172. SUBSTITUTE FOR, OR PREPARATION OF, YEAST. For discovering to the Society an effectual Substitute for Yeast, or preparation of Yeast, which, after being kept six months, shall be fit for fermenting liquors, and raising bread; the GOLD MEDAL, or THIRTY POUNDS.

Specimens of the Substitute, or of the preparation of Yeast, sufficient for trials, together with a paper sealed up, and containing an account of the composition of the Substitute, or method of preparing the Yeast, to be produced on or before the last Tuesday in November, 1793.

173. SECURING EMPTY CASKS FROM BECOMING MUSTY OR STINKING. To the person who shall discover discover to the Society the best, cheapest, and most esticacious method of securing empty Casks from becoming musty or stinking; the GOLD MEDAL, or THIRTY POUNDS.

A full description of the method, with proper Certificates that it has been efficaciously practised, to be delivered to the Society on or before the first Tuesday in February, 1794.

174. PRESERVING SALTED PRO-VISIONS FROM BECOMING RAN-CID OR RUSTY. To the person who shall discover to the Society the best, cheapest, and most efficacious method of preserving Salted Provisions from growing rancid or rusty; the Gold Medal, or Thirty Pounds,

A full description of the method, with proper CERTIFICATES that it has been found, on repeated trials, to answer the purpose intended, to be produced to the Society on or before the first Tuesday in February, 1794.

312 CHEMISTRY.

175. The same premium is extended one year further.

The Account and CERTIFICATES to be produced to the Society on or before the first Tuesday in February, 1795.

176. INCREASING STEAM. To the person who shall discover to the Society a method, verified by actual experiments, of increasing the quantity or the force of Steam, in Steam-Engines, with less such than is usually employed, provided that in general the whole amount of the expences in using Steam-Engines may be considerably lessened; the Gold Medal, or Thirty Guineas.

To be communicated to the Society on or before the first Tuelday in january, 1794.

N.B. As it is well known there are methods of preventing the ebulition of liquids by the addition of particular matters in the boiling, it is submitted to the confideration of the ingenious, whether, by the adultion

addition of some matters, or by some mechanical operations, the boiling and evaporation may not be increased.

177. The same premium is extended one year further.

To be communicated to the Society on or before the first Tuesday in January, 1795.

178. PREVENTING THE DRY-ROT IN TIMBER. To the person who shall discover to the Society the cause of the Dry-Rot in Timber, and disclose a certain method of prevention superior to any hitherto known; the Gold Medal, or Thirty Guineas.

The Accounts of the cause, and method of prevention, confirmed by repeated experiments, to be produced to the Society on or before the second Tuesday in December, 1793.

179. The same premium is extended one year further.

The

314 CHEMISTRY.

The Accounts to be produced on or before the second Tuesday in December, 1794.

180. FINE BAR-IRON. To the perfon, in England or Wales, who shall make, in the year 1792, the greatest quantity of Bar-Iron, not less than ten tons, with Coak, from Coak Pigs, equal in quality to the best Iron imported from Sweden or Russia, and as sit for converting into Steel; the Gold Medal.

SAMPLES, not less than one hundred weight, with CERTIFICATES that the whole quantity is of equal quality, to be produced to the Society on or before the first Tuesday in January, 1794.

181. The fame premium is extended one year further.

SAMPLES and CERTIFICATES to be delivered on or before the first Tuesday in January, 1795.

WHITE LEAD, WHICH SHALL NOT BE PREJUDICIAL. To the person who shall discover to the Society a method of preparing White Lead, in a manner that shall not be prejudicial to the health of the workmen employed either in making or using it, and will answer all the purposes for which White Lead is at present used; FIFTY POUNDS.

A quantity of the White Lead so prepared, with an account of the process made use of, and Certificates that not less than one ton has been manufactured in the same manner, to be produced to the Society on or before the second Tuesday in November, 1793.

183. SUBSTITUTE FOR THE BASIS OF PAINT. To the person who shall produce to the Society the best Substitute, superior to any hitherto known, for the Basis of Paint, equally proper for the purpose as the White Lead now employed; such

316 CHEMISTRY.

fuch substitute not to be of a noxious quality, and which may be afforded at a price not materially higher than that of White Lead; THIRTY POUNDS.

A quantity of the Substitute, not less than fifty pounds weight, with an ACCOUNT of the process used in preparing it, and CERTITICATES that at least five hundred weight has been manufactured, to be produced to the Society on or before the second Tuesday in November, 1793.

184. The same premium is extended one year further.

CERTIFICATES and ACCOUNTS to be produced on or before the second Tuesday in November, 1794.

185. REFINING BLOCK TIN. To the person who shall discover to the Society the best method of purifying or refining Block Tin, in such manner as to render it sit for the finer purposes to which Grain Tin is now solely applied, and at an expense that shall not render it higher in price than Grain

Grain Tin; the GOLD MEDAL, or FIFTY POUNDS.

CERTIFICATES that not less than three tons have been refined or purified, with a full detail of the process, and a quantity, not less than one hundred weight, of the Tin so refined, to be produced to the Society on or before the first Tuesday in November, 1793.

186. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in November, 1794.

187. GLAZING EARTHEN WARE WITHOUT LEAD. To the person who shall discover to the Society the cheapest, safest, most durable, and most easily susple Composition, sit for the purpose of glazing the ordinary kinds of Earthen Ware, without any preparation of Lead, and preserable to any hitherto in use; the Gold Medal, or Thirty Pounds.

SPECIMENS

318 CHEMISTRY.

SPECIMENS of the Ware fo glazed, with proper CERTIFICATES of its having fucceeded, with a SAMPLE of the materials made use of, to be produced to the Society on or before the first Tuesday in February, 1794.

Premiums

POLITE ARTS. 319

Premiums for promoting the Polite Arts.

188. HONORARY PREMIUMS FOR DRAWINGS. For the best Drawing of any kind, made with Crayons, Chalk, Black Lead, Pen, Indian Ink, or Bister, by young Gentlemen under the age of twenty-one, sons or grandsons of Peers, or Peeresses in their own right, of Great Britain or Ireland, to be produced on or before the first Tuesday in March, 1794; the Honorary Medal of the Society in Gold.

189. The fame IN SILVER, for the fecond in merit.

190, 191. The same premiums will be given, on the like conditions, to young Ladies, daughters or grand-daughters of Peers, or Peeresses in their own right, of Great-Britain or Ireland.

320 POLITE ARTS.

- 192. HONORARY PREMIUMS FOR DRAWINGS. For the best Drawing of any kind, made with Crayons, Chalk, Black Lead, Pen, Indian Ink, or Bister, by young Gentlemen under the age of twentyone; to be produced on or before the first Tuesday in March, 1794; the Gold Medal.
- 193. For the next in merit, the SILVER MEDAL.
- 194, 195. The fame premiums will be given for Drawings by young Ladies.
- N.B. As the foregoing Honorary Premiums are intended only for such of the Nobility and Gentry as may hereafter become patrons or patronesses of the Arts; persons professing any branch of the Polite Arts, or any business dependent on the Arts of Design, or the sons or daughters of such persons, will not be admitted Candidates in these Classes.

The two following Premiums (Classes 196 and 197) are offered in conformity to the Will of the late John Stock, of Hamp-stead, Esq.

196. DRAWING. For the best Drawing, in Indian Ink, of the Equestrian Statue of King Charles the First, at Charing-Cross, not less than eighteen inches high, to be produced on or before the third Tuesday in February, 1794, a SILVER MEDALLION, with the following engraved inscription: The Premium given by the Society for the Encouragement of Arts, Manufactures, and Commerce, in conformity to the Will of John Stock, of Hampstead, Esq. and Five Guineas, in consideration of the Drawing being left with the Society as their property.

197. PORTRAIT. For the best Copy, in Oil-Colours, of a Portrait of the late Y John

322 POLITE ARTS.

JOHN STOCK, of Hampstead, Esq. to be produced on or before the third Tuesday in February, 1794, a SILVER MEDAL-LION, with the following engraved infcription: The Premium given by the Society for the Encouragement of Arts, Manufactures, and Commerce, in conformity to the Will of John Stock, of Hampstead, Esq.

- 198. DRAWINGS OF OUTLINES. For the best Outline, after an original group or cast, in plaster, of Human Figures, by persons of either sex, under the age of sixteen, the principal sigure not less than twelve inches; to be produced on or before the third Tuesday in February, 1794; the greater SILVER PALLET.
- 199. For the next in merit, the leffer SILVER PALLET.
- N.B. These drawings are to be made on Paper, with Chalk, Black Lead, Indian Ink, or Bister; and the original either to be

be produced to the Society, or to be referred to for their examination.

200. DRAWINGS OF MACHINES. For the best Perspective Drawing, by persons of either sex under the age of twenty-one years, of the Spinning and Winding Machine, by Mr. Burt, in the Society's Repository, the greater SILVER PALLET; to be produced on or before the third Tuesday in February, 1794.

N. B. Such Candidates as propose to make Drawings for this Premium, will be admitted by the Register any day (Sundays and Wednesdays excepted), between the hours of ten and two.

The Drawing to which the premium is adjudged, is to remain the property of the Society.

201. DRAWINGS OF LAND-SCAPES. For the best Drawing of a Landscape after nature, by persons of either fex under twenty-one years of age, to be produced on or before the third Tuesday

Y 2

ļŖ

324 POLITE ARTS.

in February, 1794, the greater SILVER PALLET.

202. For the next in merit, the lesser Silver Pallet.

Each Candidate must mention, on the front of the Drawing, from whence the View was taken; and the Drawings must be made with Chalk, Pen, Indian Ink, Water-Colours, or Bister.

203. HISTORICAL DRAWINGS. For the best Historical Drawing, being an original composition, of five or more Human Figures; the height of the principal figure not less than eight inches; to be made with Crayons, Chalk, Black Lead, Pen, Indian Ink, Water-colours, or Bister, and to be produced on or before the third Tuesday in February, 1794; the GOLD PALLET.

204. For the next in merit, the greater Silver Pallet.

205. SURVEYS OF COUNTIES. To the person who, in the year 1792, shall complete

complete and publish an accurate Survey of any one County in England or Wales, on a scale of not less than one inch to a mile, for which rewards have not already been given by the Society; the GOLD MEDAL, or FIFTY POUNDS.

CERTIFICATES of the accuracy of the Survey, and that it was begun after the first of June, 1789, together with the Map, to be produced on or before the last Tuesday in January, 1794.

The Map to which the premium shall be adjudged, to remain the property of the Society.

N. B. The Society are already in possession of Surveys of the following Counties, viz. Devonshire, Derbyshire, Somersetshire; Northumberland, Susfolk, Leicestershire, Cumberland, Lancashire, Dorsetshire, and Hampshire.

206. The same premium is extended one year further.

The Survey to be begun after the first of June, 1790; and the Map to be produced

326 POLITE ARTS.

on or before the last Tuesday in January, 1795.

207. The same premium is extended one year further.

The Survey to be begun after the first of June, 1791; and the Map to be produced on or before the last Tuesday in January, 1796.

208. The same premium is extended one year further.

The Survey to be begun after the first of June, 1792; and the Map to be produced on or before the last Tuesday in January, 1797.

209. NATURAL HISTORY. To the Author who shall publish, in the year 1793, the Natural History of any County of England or Wales, the Gold Medal, or Fifty Pounds.

It is required that the feveral natural productions, whether animal, vegetable, or mineral, peculiar to the county, or found therein, be carefully and specifically arranged

ranged and described, in order that the Public may be enabled to judge what Arts or Manufactures are most likely to succeed in such County.

The Work to be delivered to the Society on or before the last Tuesday in January, 1794.

210. The same premium is extended one year further.

The Work to be delivered to the Society on or before the last Tuesday in January, 1795.

211. The same premium is extended one year further.

The Work to be delivered to the Society on or before the last Tuesday in January, 1796.

328 POLITE ARTS.

CONDITIONS.

No person who has gained the first Premium in any Class, will be admitted a Candidate in a Class of an inferior age; and no Candidate shall receive more than one Premium in one year; nor will they who for two successive years shall gain the first Premium in one Class, be ever again admitted as Candidates in that Class.

No person shall ever be admitted a Candidate in any Class, in which he has three times obtained the whole of the first Premium.

No Candidate shall send in more than one Performance in any one Class.

All the Claims which are produced each year before the Committee of Polite Arts (to which Premiums or Bounties are adjudged) are to remain with the Society fix weeks after the determination, unless the Candidates, for particular reasons, do apply to have their performances returned.

No Claim for a Premuium in the Polite Arts will be admitted, that has obtained tained, or has been produced in order to obtain, a Premium, Reward, or Gratification, from any other Society, or any Academy or School.

All Performances that obtain Premiums in the Polite Arts, must be begun after the publication of such Premiums.

Purposely to encourage real merit, and to prevent any attempts to impose on the Society, by producing Drawings which shall have been made or retouched by any other person than the Candidate, the Society is resolved, upon all occasions, with respect to the successful Candidates in Classes 187 to 192 inclusive, to prove their abilities, by requiring a specimen made under the inspection of the Committee of Polite Arts, in every instance where such proof can be obtained.

It is required that all Candidates in the Polite Arts do fignify on their Drawings, their age, and whether the performances are originals, or copies, and, if copies, whence they were taken.

Premiums

330 MANUFACTURES.

Premiums for encouraging and improving Manufactures.

212. SILK. For the greatest quantity of merchantable Silk, not less than ten pounds weight, produced by any one person in England, in the year 1793, the GOLD MEDAL.

SPECIMENS of the SILK, not less than one pound, with CERTIFICATES that the whole is of equal quality, and produced in England, to be delivered to the Society on or before the first Tuesday in January, 1794.

- 213. For the second greatest quantity, not less than five pounds weight, the SIL-VER MEDAL.
- 214, 215. The fame premiums are extended one year further.

The Specimens and Certificates to be delivered to the Society on or before the first Tuesday in January, 1725.

217. WEAVING FISHING-NETS. For the best specimen of Plain Netting, for Fishing-Nets, superior to any hitherto in use, not less than twenty yards long, and six feet deep, woven in a Loom, or other Machine; to be produced to the Society on or before the second Tuesday in January, 1794; FIFTY GUINEAS.

N. B. It is expected that the Specimen produced be made in such a manner, as to be cut and joined without more loss than usual, that it have such a plain selvage as the common Fishing-Nets, and that the Knot be equally fast with those in common use, and as easily repaired.

332 MANUFACTURES.

218. CLOTH FROM HOP-STALKS OR BINES. To the person who shall produce to the Society the greatest quantity, not less than thirty yards, of Cloth, at least twenty-seven inches wide, made in England or Wales of Hop-Stalks or Bines, and superior to any hitherto manusactured in England of that material, the Gold Medal, or Thirty Pounds.

One pound of the Thread of which the Cloth is made, and thirty yards of the Cloth, together with proper CERTIFICATES that the whole is manufactured from Hop-Stalks or Bines, to be produced to the Society on or before the second Tuesday in December, 1793.

N. B. The Society are already in possession of Cloth made in England from Hop-Stalks or Bines, which may be inspected by application to the Register.

219. WICKS FOR CANDLES OR LAMPS. To the person who shall discover to the Society a method of manufacturing

turing Hop-Stalks or Bines, so as to render them fit for the purpose of supplying the place of Cotton, for Wicks of Candles or Lamps, TWENTY GUINEAS.

SAMPLES, not less than five pounds weight, of the Wicks, so prepared, to be produced to the Society, with CERTIFICATES that the whole quantity is made from Hop-Stalks or Bines, on or before the second Tuesday in January, 1794.

220. The same premium is extended one year further.

SAMPLES and CERTIFICATES to be produced on or before the second Tuesday in January, 1795.

221. PAPER FROM RAW VEGE-TABLE SUBSTANCES. To the perfon in England or Wales who shall make the greatest quantity, not less than ten reams, of the best and most useful Paper, from Raw Vegetable Substances, Twenty Guineas.

CERTIFICATES of the making fuch Paper, and one ream of the Paper, to be produced

334 MANUFACTURES,

produced on or before the first Tuesday in November, 1793.

N. B. The Society are in possession of two volumes, containing a great variety of specimens of Paper made from Raw Vegetables, viz. Thistles, Potatoe-Haum, Poplar, Hop-bines, &c. which volumes may be inspected by any person, on application to the Register.

PLOYING THE POOR. To the person who shall produce to the Society, the best practical and most economical Plan for the maintenance and employment of the Poor in Parish Workhouses, superior to any hitherto generally known, the Gold Medal, or Fifty Pounds.

The Plans to be delivered to the Society on or before the first Tuesday in March, 1794.

Premiums

Premiums for Invention in Mechanicks.

TRANSIT INSTRUMENT. To the person who shall invent and produce to the Society a cheap and portable Transit Instrument, which may easily be converted into a Zenith Sector, capable of being accurately and expeditiously adjusted for the purposes of finding the Latitudes and Longitudes of places, and superior to any portable Transit Instrument now in use, the Gold Medal, or Forty Guinneas.

To be produced on or before the last Tuesday in January, 1794.

224. GUN FOR THROWING HARPOONS. To the person who shall produce to the Society the best improvement in the construction of a Gun for throwing Harpoons, so as to render it more manageable than those at present in

nse,

336 MECHANICKS.

use, the Silver Medal, and Twenty Guineas.

The Gun to be produced to the Society on or before the first Tuesday in December, 1793.

225. TAKING WHALES BY THE GUN-HARPOON. To the person who, in the year 1793, shall strike the greatest number of Whales, not sewer than three, with the Gun-Harpoon, TEN GUINEAS.

Proper CERTIFICATES of the striking such Whales, and that they were actually taken in the year 1793, signed by the Master, or by the Mate when the Claim is made by the Master, to be produced to the Society on or before the last Tuesday in December, 1793.

226. The same premium is extended one year further.

CERTIFICATES to be produced on or before the last Tuesday in December, 1794.

227. DRIVING BOLTS INTO SHIPS. To the person who shall invent and produce to the Society a Model, shewing a method of driving Bolts into Ships, particularly those of Copper, without splitting the Head or bending them, with more dispatch, in all directions, and tighter, than by any means hitherto known or in use, Thirty Guineas.

The Model to be produced to the Society on or before the first Tuesday in February, 1794.

228. PORTABLE MACHINE FOR LOADING AND UNLOADING GOODS. To the person who shall invent and produce to the Society, the best, most simple, and portable Machine, superior to any hitherto known, or in use, for the purpose of loading and unloading goods; the GOLD MEDAL, or FORTY GUINEAS.

Z The

338 MECHANICKS.

The machine to be delivered to the Society on or before the first Tuesday in January, 1794.

229. METAL ROPE OR CHAIN. To the person who shall have invented a Chain or Rope of Copper, or other Metal, superior to any hitherto made, sufficiently flexible to work well, and IN ALL DIRECTIONS, over pullies, and which shall serve every purpose of a good Hempen Rope of at least two inches diameter, FIFTY POUNDS.

The Candidate to produce to the Society satisfactory CERTIFICATES that such Metal Rope or Chain has been used to advantage in manufactories, or large works, where Hempen Ropes have been hitherto employed.

The CERTIFICATES, and a Sample of the Metal Rope or Chain, not less than ten yards long, to be produced to the Society on or before the first Tuesday in November, 1793.

230. HAND MILL. To the perfon who shall produce to the Society a better-constructed Hand Mill, for general purposes, than any now known or in use, the SILVER MEDAL, or TWENTY GUINEAS.

To be delivered to the Society on or before the last Tuesday in December, 1793.

231. MACHINE FOR RAISING COALS, ORE, &c. &c. To the perfon who shall invent a Machine for raising Coals, Ore, &c. from Mines, which shall produce the effect at a less expence than those already known or in use, the Gold Medal, or Fifty Guineas.

A Model of the Machine, made on a scale of not less than one inch to a soot, to be produced to the Society on or before the second Tuesday in February, 1794.

232. MACHINE FOR RAISING WATER. To the person who shall invent a Machine on a better, cheaper, and Z 2 more

more simple construction than any hitherto known or in use, for raising Water out of Wells, &c. from a depth not less than fifty feet, FORTY GUINEAS.

CERTIFICATES of the performance of the Machine, and a Model of it, on a scale of not less than one inch to a foot, to be produced to the Society on or before the first Tuesday in February, 1794.

233. MACHINE FOR CLEARING RIVERS. For the best Model of a Machine, superior to any now in use, for clearing Navigable Rivers from Weeds at the least expence, FORTY GUINEAS.

To be produced to the Society on or before the first Tuesday in February, 1794.

234. METHOD OF EXTINGUISH-ING FIRES. To the person who shall produce to the Society, the most speedy and effectual method of extinguishing Fires in houses or other buildings, superior to any hitherto known or in use, the GOLD MEDAL, or FIFTY GUINEAS.

To be produced on or before the second Tuesday in February, 1794.

235. IMPROVEMENT OF WHEEL-CARRIAGES. To the person who shall discover to the Society the principles, and point out the construction, upon which Wheel Carriages may be drawn with the least fatigue to the horse or horses employed, the Gold Medal, or Fifty Pounds.

The CLAIMS to be delivered to the Society on or before the fecond Tuesday in December, 1793.

Premiums offered for the Advantage of the British Colonies.

236. NUTMEGS. For the greatest quantity of merchantable Nutmegs, not less than ten pounds weight, being the growth of his Majesty's dominions in the West Indies, and equal to those imported from the Islands of the East Indies, the Gold Medal, or One Hundred Pounds.

Satisfactory CERTIFICATES, from the Governor, or Commander in Chief, of the place of growth, with an account of the number of trees, their age, nearly the quantity of fruit on each tree, and the manner of culture, to be produced on or before the first Tuesday in December, 1793.

237. The same premium is extended one year further.

CERTIFICATES to be produced on or before the second Tuesday in December, 1794.

N.B.

- N. B. Any person desirous of information on the subject of Nutmeg-trees, may obtain it from a Memorial on the Fructissication of the Nutmeg, and the surest method of cultivating it to advantage, by the King's Gardener at the Isle of Bourbon, inferted in Mr. Maty's Review for August, 1783.
- 238. CINNAMON. For importing into the port of London, in the year 1793, the greatest quantity, not less than twenty pounds weight, of Cinnamon, being the growth of some of the Islands in the West Indies belonging to the Crown of Great Britain, and equal in goodness to the Cinnamon brought from the East-Indies, the Gold Medal, or Fifty Pounds.

SAMPLES, not less than two pounds weight, with CERTIFICATES that the whole quantity is equal in goodness; together with satisfactory CERTIFICATES, figned by the Governor, or Commander in Chief, of the place of growth, with an Z 4 account

account of the number of trees growing on the spot, their age, and the manner of culture; to be produced to the Society on or before the first Tuesday in January, 1794.

239. The same premiums are extended one year further.

The SAMPLES and CERTIFICATES to be produced on or before the first Tuesday in January, 1795.

240. BREAD-FRUIT TREE. To the person who, in the year 1793, shall convey from the Islands of the South Sea, to any of the Islands in the West-Indies subject to the Crown of Great Britain, the greatest number, not sewer than six, of one or both species of the Bread-fruit Tree, in a growing state, the GOLD MEDAL.

CERTIFICATES, figned by the Governor or Commander in Chief of the Island, of the importation of the trees, and of the state they were in at the time of signing such Certificates, to be delivered to the Society

Society on or before the fecond Tuesday in October, 1793.

241. The fame premium is extended one year further.

CERTIFICATES to be produced on or before the second Tuesday in October, 1794.

- 242. KALI FOR BARILLA. To the person who shall have cultivated, in the Bahama Islands, or any other part of his Majesty's dominions in the West Indies, in the year 1791, the greatest quantity of land, not less than two acres, with Spanish Kali, sit for the purpose of making Barilla, the GOLD MEDAL.
- 243. For the next greatest quantity, not less than one acre, the SILVER MEDAL.

CERTIFICATES, figned by the Governor, or Commander in Chief, for the time being, of the quantity of land so cultivated, and of the state of the Plants at the time of signing such Certificates, to be delivered to

the

the Society on or before the second Tuesday in November, 1793.

244, 245. The fame premiums are extended one year further.

CERTIFICATES to be delivered on or before the fecond Tuesday in November, 1794.

246, 247. The same premiums are extended one year further.

CERTIFICATES to be produced on or before the second Tuesday in November, 1795.

248. DISCOVERY OF A PASSAGE BY LAND, FROM UPPER CANADA TO THE SOUTH SEA. To the perfon who shall first discover and open a passage by land, from the north-west parts of Upper Canada to the South Sea, between Nootka Sound and the Straits of Kamchatka, or to the navigable part of any River that disembogues itself into the South Sea within those limits, the Gold Medal.

Such

Such Discovery to be ascertained by a CERTIFICATE under the hand and seal of the Governor, or Commander in Chief for the time being, of the said province of Upper Canada.

249. DESTROYING THE INSECT COMMONLY CALLED THE BORER. To the person who shall discover to the Society an effectual method of destroying the Insect commonly called the Borer, which has of late years been so destructive to the Sugar-Canes in the West-India Islands, the Gold Medal, or Fifty Pounds.

The Discovery to be ascertained by satisfactory Certificate, under the hand or seal of the Governor or Commander in Chief for the time being, and of some other respectable persons, inhabitants of the Islands in which the remedy has been successfully applied; such Certificates to be delivered to the Society on or before the first Tuesday in January, 1794.

251. The fame premium is extended one year further.

CERTIFICATES to be delivered on or before the first Tuesday in January, 1795.

251. The same premium is extended one year further.

CERTIFICATES to be delivered on or before the first Tuesday in January, 1796.

252. BOTANIC GARDEN IN THE BAHAMAISLANDS. To the person who, before the first of January, 1795, shall set apart, and properly sence and cultivate, the greatest quantity of ground, not less than five acres, in any of the Bahama Islands, as a botanic garden, for the purpose of making experiments in the culture of those articles which are the peculiar production of the tropical climates, and which may tend to promote the commerce and manufactures of this country; the Gold Medal, or One Hundred Guineas.

It is required that any person claiming the foregoing premium, should produce to the the Society, on or before the first Tuesday in January, 1796, a CERTIFICATE from the Governor or Commander in Chief of the Bahama Islands for the time being, of his having complied with the above requisitions, and that the garden is in a proper state of culture at the time of signing such Certificate.

253. The same premium is extended one year further.

CERTIFICATES to be produced on or before the first Tuesday in January, 1797.

Society's Office, Adelphi, May 22, 1793.

Ordered,

THAT THE SEVERAL CANDIDATES AND CLAIMANTS TO WHOM THE SO-CIETY SHALL ADJUDGE PREMIUMS OR Bounties, do attend at the So-CIETY'S OFFICE IN THE ADELPHI, ON THE LAST TUESDAY IN MAY, 1794, AT TWELVE O'CLOCK AT NOON, TO RECEIVE THE SAME; THAT DAY BE-ING APPOINTED BY THE SOCIETY FOR THE DISTRIBUTION OF THEIR RE-WARDS: AND BEFORE THAT TIME NO PREMIUM OR BOUNTY WILL BE DELIVERED, EXCEPTING ТО THOSE WHO ARE OUT OF THE KINGDOM, OR PREVENTED BY UNAVOIDABLE ACCI-DENTS.

IN CASES WHERE THE SOCIETY MAY THINK FIT TO ADMIT EXCUSES FOR NOT ATTENDING IN PERSON, DEPUTIES MAY BE SUBSTITUTED TO RECEIVE THE REWARDS, PROVIDED SUCH DEPUTIES ARE EITHER MEMBERS OF THE SOCIETY, OR THE SUPERIOR OFFICERS THEREOF.

GENERAL

NOTWITHSTANDING the Society referve to themselves the power of giving, in all cases, such part only of any Premium as the Performance shall be adjudged to deserve, or of withholding the whole, if there be no merit; yet the Candidates may be assured the Society will always judge liberally of their several Claims.

It is required that the matters for which Premiums are offered, be delivered in without names, or any intimation to whom they belong; that each particular thing be marked in what manner each Claimant thinks fit, such Claimant fending with it a paper sealed up, having on the outside a corresponding mark, and on the inside the Claimant's name and address: and all Candidates are to take notice, that no Claim for a Premium will be attended to, unless the conditions of the Advertisement are fully complied with.

No Papers shall be opened, but such as shall gain Premiums, unless where it appears to the Society absolutely necessary for the determination of the Claim: all the rest shall be returned unopened, with the Matters to which they belong, if inquired after by the Marks, within two years; after which time, if not demanded, they shall be publicly burnt, unopened, at some meeting of the Society.

All Models of Machines, which obtain Premiums or Bounties, shall be the property of the Society.

All the Premiums of this Society are defigned for that part of Great Britain called England, the dominion of Wales, and the Town of Berwick upon Tweed, unless expressly mentioned to the contrary.

The Claims shall be determined as soon as possible after the delivery of the specimens.

No

No person shall receive any Premium, Bounty, or Encouragement, from the Society, for any matter for which he has obtained, or proposes to obtain, a Patent.

A Candidate for a Premium, or a person applying for a Bounty, being detected in any disingenuous method to impose on the Society, shall forfeit such Premium or Bounty, and be deemed incapable of obtaining any for the suture.

The Performances which each year obtain Premiums or Bounties, are to remain with the Society until the end of May, except as mentioned in the Conditions annexed to the Premiums offered for promoting the Polite Arts.

No Member of this Society shall be a Candidate for, or entitled to receive, any Premium, Bounty, or Reward whatsover, except the Honorary Medal of the Society.

A a Where

Where Certificates are required to be produced in claim of Premiums, they should be expressed, as nearly as possible, in the words of the respective advertisements, and should not be from the Candidate (solely), but from some other person or persons who have a positive knowledge of the sacts certified.

Where Premiums or Bounties are obtained in consequence of specimens produced, the Society mean to retain such part of those specimens as they may judge necessary, making a reasonable allowance for the same.

No Candidates shall be present at any meetings of the Society or Committees, or admitted at the Society's Rooms, after they have delivered in their Claims, until such Claims are adjudged, unless summoned by the Committee.

N. B. Any information or advice that may forward the defigns of this Society for the public good, will be received thankfully, and duly confidered, if communicated by letter, addressed to the Society, and directed to Mr. More, the Secretary, at the Society's Office, in the Adelphi Buildings, London.

*** In case any person should be inclined to leave a sum of money to this Society, by will, the following form is offered for that purpose:

Item. I give and bequeath unto A. B. and C. D. the fum of upon condition and to the intent that they, or one of them, do pay the same to the Collector for the time being, of a Society in London, who now call themselves the Society for the Encouragement of Arts, Aa 2 Manu-

Manufactures, and Commerce; which faid fum of I will and defire may be paid out of my personal estate, and applied towards the carrying on the laudable designs of the Society.

By order of the Society,

SAMUEL MORE, Secretary.